



# SystemC CCI WG Search Predicate

Sonal Poddar, Intel  
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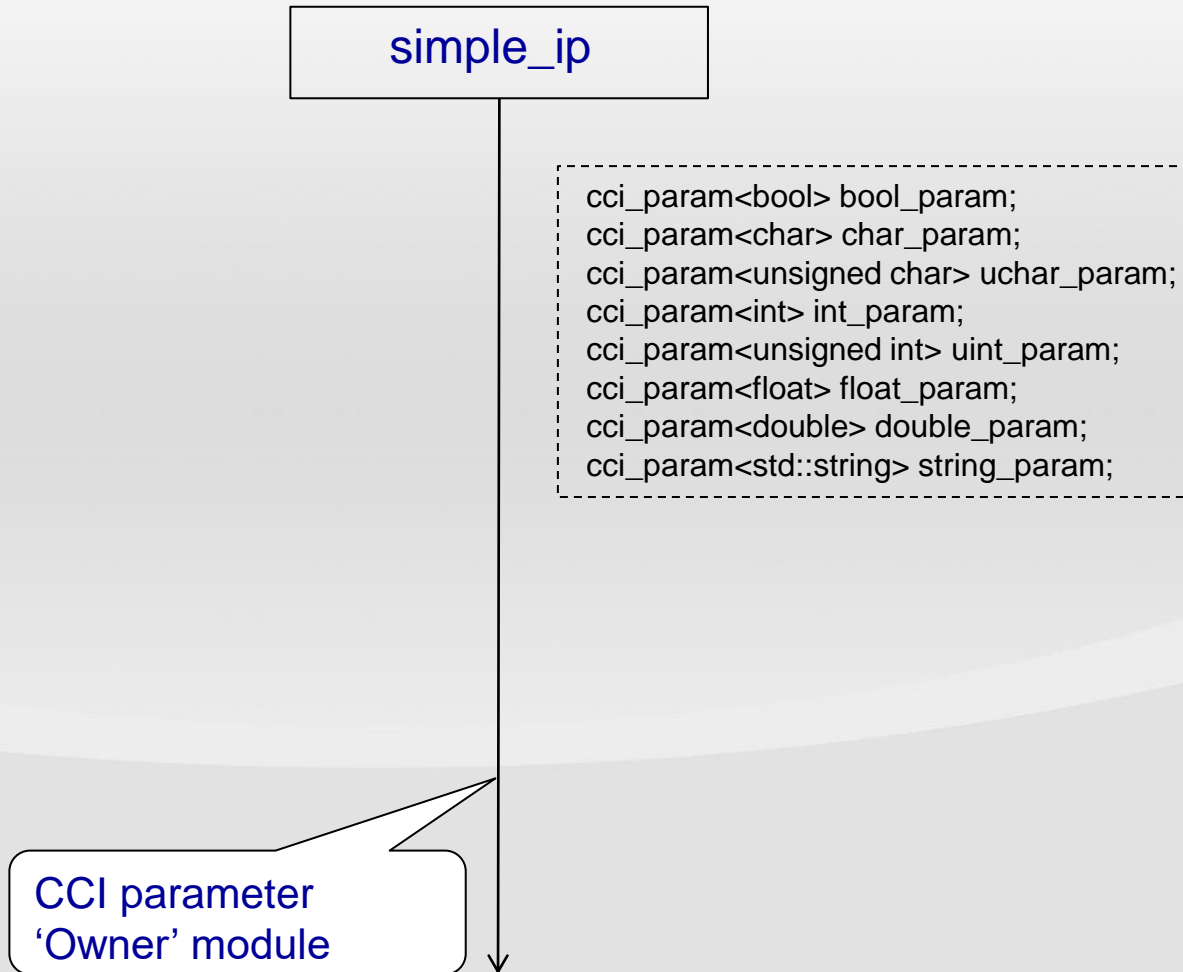


# Search Predicate

- The owner module `simple_ip` has CCI parameters of different data types.
- A module `search_ip` performs various searches and reports the matching parameters.
- In this example, module `search_ip` performs the following parameter searches:
  - Integer value type
  - String value type
  - Numeric value greater than or equal to 3 and smaller than 85
  - Parameter name contains the character 't'

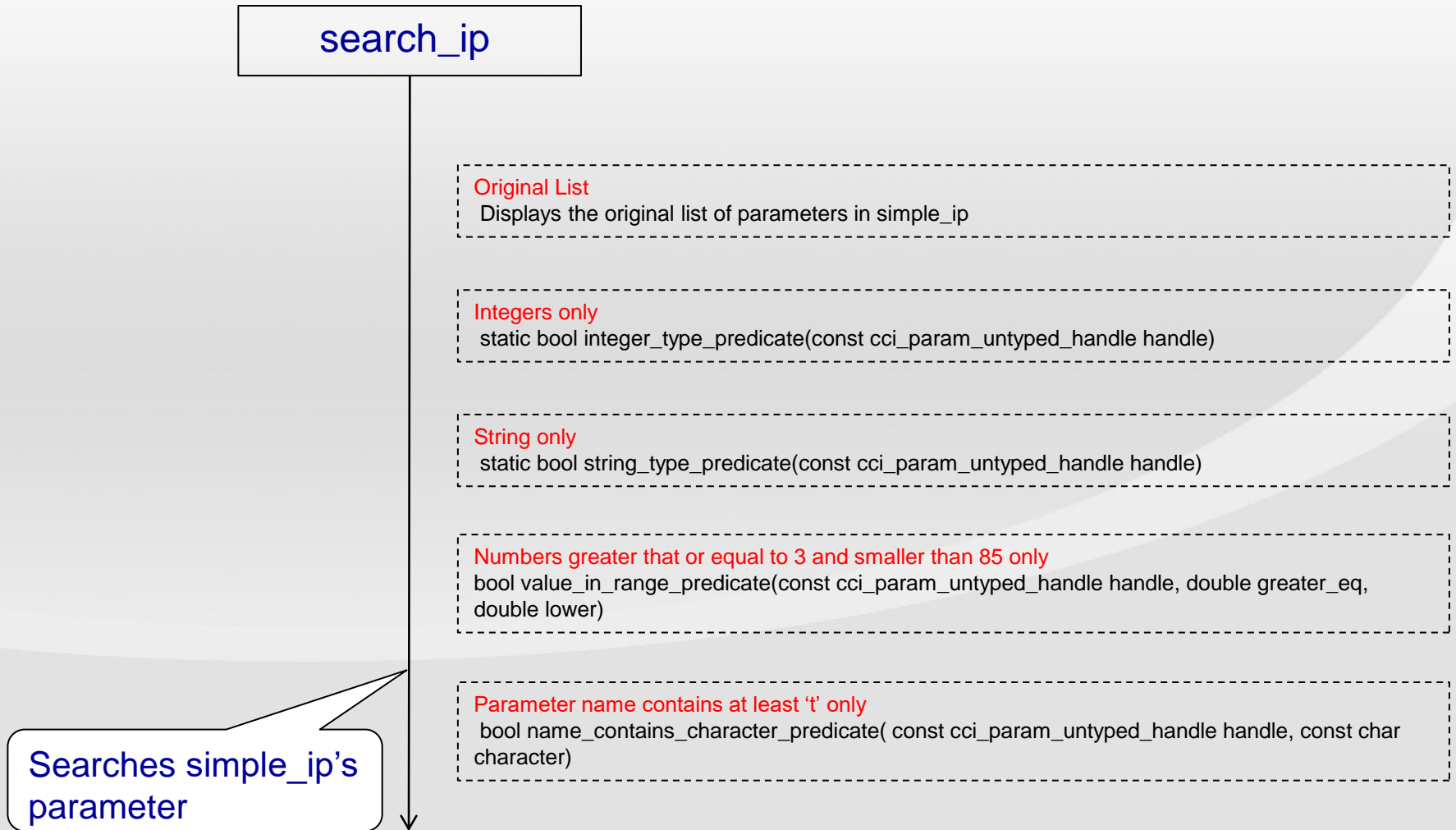
# Example Sequence Diagram

CCI parameters representing basic data types



# Example Sequence Diagram

The search\_ip module which search sim\_ip's parameter



# Expected Output

## (ex22\_Search\_Predicate.log)

SystemC Simulation

```
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.bool_param is 1
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.char_param is A
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.uchar_param is U
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.int_param is -1
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.uint_param is 0xfeedf00d
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.float_param is 3.14
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.double_param is 2.714
Info: sim_ip: @0 s, @Ctor: Default value of sim_ip.string_param is C++ String
Info: sc_main: Begin Simulation.
Info: srch_ip: @0 s, execute: Original list
sim_ip.bool_param = true
sim_ip.char_param = 65
sim_ip.double_param = 2.714
sim_ip.float_param = 3.140000104904175
sim_ip.int_param = -1
sim_ip.string_param = "C++ String"
sim_ip.uchar_param = 85
sim_ip.uint_param = 4277006349
```

# Cont'd

Info: srch\_ip: @0 s, execute: Integers only

sim\_ip.char\_param = 65

sim\_ip.int\_param = -1

sim\_ip.uchar\_param = 85

sim\_ip.uint\_param = 4277006349

Info: srch\_ip: @0 s, execute: String only

sim\_ip.string\_param = "C++ String"

Info: srch\_ip: @0 s, execute: Numbers greater than or equal to 3 and smaller than 85 only

sim\_ip.char\_param = 65

sim\_ip.float\_param = 3.140000104904175

Info: srch\_ip: @0 s, execute: Parameter name contains at least 't' only

sim\_ip.float\_param = 3.140000104904175

sim\_ip.int\_param = -1

sim\_ip.string\_param = "C++ String"

sim\_ip.uint\_param = 4277006349

Info: sc\_main: End Simulation.